

Kennecott Minerals Company

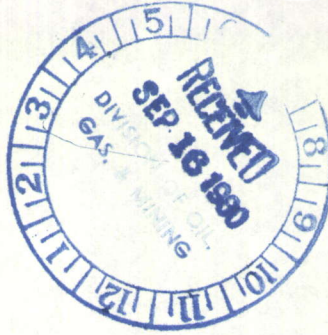
A Division of Kennecott Corporation

Utah Copper Division

P.O. Box 6500

Salt Lake City, Utah 84106

801 263-6123



ACT/045/011

September 10, 1980

Kennecott

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
1588 West North Temple
Salt Lake City, Utah 84116

Gentlemen:

Attached herewith are two each of the Notice of Intention to Commence Mining Operations and Mining and Reclamation Plan covering a proposed limestone quarrying operation by Kennecott in Mercur Canyon, Utah. Processing and approval of these documents pursuant to the State of Utah Mined Land Reclamation Act are requested to enable Kennecott's proceeding with a designated operation this year.

We suggest that surety provision for the reclamation work be covered by agreement. Please let me know if this is acceptable to the Board and any other matters as pertains to processing and approval of this application.

Yours very truly,

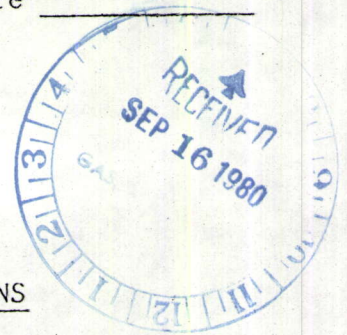
W. D. Southard
Engineering Services Manager

CFS/bja

MINING APPLICATION
NO. _____

Date _____

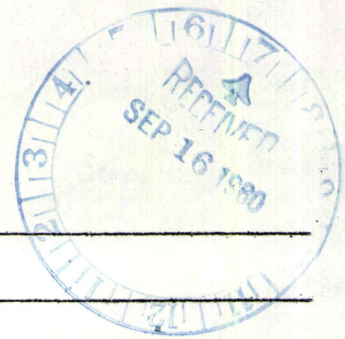
STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116



NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS
(Sec Rule M of General Rules and Regulations)

1. Name of Applicant or Company Kennecott Corporation
Kennecott Minerals Company, Utah Copper Division
Corporation (☒) Partnership () Individual ()
2. Address P. O. Box 6500, Salt Lake City, Utah 84106
Permanent Temporary
3. Name and title of person representing company W. H. Jensen, General Manager
4. Address Same Office Phone 263-6123
5. Location of Operation Tooele Sec. 11 T. 6 S. R. 4 W.
County
6. Name of Mine Mercur Limestone
7. Mineral to be mined: Mining method:
() Coal () Flagstone Open-pit
() Copper () Gravel
() Manganese () Shale
() Iron Ore () Uranium
() Phosphate () Gilsonite
() Potash () Bituminous Sandstone
() Fluorspar () Tungsten
(☒) Other (specify) Limestone
8. Have you or any person, partnership or corporation associated with you received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein?
(☒) Yes () No
If yes, list all approval numbers now under surety:
#ACT-035-002

9. Owner/Owners of record of the surface area within the land to be affected:
U. S. Government, Bureau of Land Address _____
Management Address _____
Address _____
Address _____



10. Owner/Owners of record of minerals to be mined:

Kennecott Corporation Address Same

11. Owner/Owners of record of all other minerals within any part of the land affected:

N/A Address _____

11a. Have the above owners been notified in writing?
() Yes () No

12. Source of Operator's legal right to enter and conduct operations on land to be covered by the Notice Unpatented Mining Claim Ownership

13. Approximate acreage to be disturbed:

A) Mining Operation Area - 3.5 acres
(include operations, storage, & disposal area)
B) Access Road or Haulageway - 1.6 acres
C) Drainage System - _____ acres

TOTAL ACRES: 5.1

14. Give the names and post office addresses of every principal Executive, Officer, Partner, (or person performing a similar function) of Applicant:

	Name:	Title:	Address:
a.	<u>W. H. Jensen</u>	<u>General Manager</u> <u>Utah Copper Division</u>	<u>P. O. Box 6500</u> <u>Salt Lake City, Utah 84106</u>
b.	<u>I. G. Pickering</u>	<u>Senior Vice President</u> <u>Kennecott Minerals Co.</u>	<u>P. O. Box 11248</u> <u>Salt Lake City, Utah 84147</u>
c.	<u>G. F. Joklik</u>	<u>President</u> <u>Kennecott Minerals Co.</u>	<u>P. O. Box 11248</u> <u>Salt Lake City, Utah 84147</u>
d.	_____	_____	_____

15. Has Applicant, any subsidiary or affiliate or any person, partnership, association, trust, or corporation controlled by or under common control with Applicant, or any person required to be identified by Item 14, ever had an approval of a Notice of Intention withdrawn or has surety relating thereto ever been forfeited? () Yes (X) No

If yes, explain:

STATE OF Utah
COUNTY OF Salt Lake

I, W. H. Jensen, having been duly sworn
depose and attest that all of the representations contained in the foregoing
application are true to the best of my knowledge; that I am authorized to
complete and file this application on behalf of the Applicant and this
application has been executed as required by law.

Signed: [Signature]

W. H. Jensen, General Manager

Taken, subscribed and sworn to before me the undersigned authority
in my said county, this 11 day of September, 1980.

Notary Public: Keith J. Hansen

My Commission Expires: November 2, 1983

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides as follows:

"Information relating to the location, size, or nature of the deposit and marked confidential by the operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the operator, or until the mining operation has been terminated as provided in subsection (2) of section 40-8-21."

Is confidential information contained herein?

YES _____ (Initial)

NO X _____ (Initial)

Sections desired to be maintained as confidential information -

_____	_____	_____
_____	_____	_____
_____	_____	_____



MINING APPLICATION
NO. _____

Date _____

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116



MINING AND RECLAMATION PLAN
(Other forms may be used in lieu of MR 2, provided
they contain the same information)

1. Name of Applicant or Company Kennecott Corporation
Kennecott Minerals Company, Utah Copper Division
2. Proposed type of operation Open-pit Mining of Limestone
3. (a) Prior Land Use(s) Some prospecting for minerals - livestock grazing
(b) Current Land Use(s) Limited grazing of livestock
(c) Possible or Prospective Future Land Use(s) Same as (a)
4. What vegetation exists on the land proposed to be affected Typical basin
and range grasses and pinion-juniper vegetation.
(a) Types and Estimated Percent cover or density: Approx. 5% cover consisting
of typical basin and range grasses and pinion-juniper vegetation
5. What is the pH range of soil before mining? 5.6 to 7.5 pH
Name of Person or Agency and method of determining pH Kennecott laboratory
technicians by mixing 100 gm of soil and 100 ml distilled water
6. Site elevation above sea level 6000 to 6300
7. In case of coal, oil shale, and bituminous sandstone:
Principal seam(s) and thickness(es) None evident
8. Estimated duration of mining operations one (1) year to mine 10,000 tons
9. Has overburden, waste or rejected materials been classified as acid or
alkali producing? (X) Yes () No
Does the above material being moved have any other characteristics
affecting revegetation? No
10. Will any underground workings or aquifers be encountered? () Yes (X) No
Describe _____
Is there an active discharge of water from abandoned deep mines on or
crossing the land affected? () Yes (X) No If yes, describe
the quality of water being discharged. _____

11. Describe specifically a detailed procedure for: (See attached narrative)
- (a) The mining sequence
 - (b) The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.
 - (c) The procedure for site preparation including removing trees and brush.
 - (d) The method for removing and stockpiling topsoil or disturbed materials.
 - (e) The method for the placement or containment of all disturbed materials, to include the method for handling of all acid or alkali-producing and toxic materials.
 - (f) A procedure for final stabilization of disturbed materials.

GRADING AND REGRADING

Specifically describe: (See attached narrative)

- (a) Typical cross-section of regrading.
- (b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.
- (c) What type of soil treatment will be utilized.
- (d) The method of drainage control for the final regraded area.
- (e) Maximum grading slope.

TESTING

1. Describe method for testing stability of reclamation fill material.
The stability of the soil material will not be a problem. No testing
of the stability of reclamation fill material is necessary.

Describe method for the testing of soil that is intended to support
vegetation The reseeding will occur as the soil is deposited on the
slopes to take advantage of the loose nature of the fill.

2. Describe any soil treatment employed as an aid to revegetation _____

A commercial fertilizer (16-16-8) will be used on reclamation sites.

3. Describe surface preparation of areas intended to support vegetation:

All areas smooth enough to work will be contoured with a small dozer.

The grain drill will apply seed mix at a rate of 20 lbs/acre.

REVEGETATION

1. Revegetation to be completed by:

<input checked="" type="checkbox"/> Operator	<input type="checkbox"/> Hydroseeding
<input type="checkbox"/> Soil Conservation District	<input type="checkbox"/> Aerial Seeding
<input type="checkbox"/> Private Contractor	<input checked="" type="checkbox"/> Conventional or Rangeland Drilli
<input type="checkbox"/> Other (specify) _____	<input checked="" type="checkbox"/> Broadcast
	<input type="checkbox"/> Other _____

Mining Plan

The sequence of mining will be initiated by constructing two short access roads. One road will extend approximately 400 feet from Swensen Gulch westward to the intended soil stockpile. The other road will extend approximately 300 feet eastward to the quarry site and will replace the steep access road connecting Swensen Gulch with the ridge crest.

The 10,000 tons of material will involve removing approximately 244,000 cubic yards of soil and limestone from the 6,260-foot elevation down to the 6,170-foot elevation. Before mining commences, shrubs and brush will be removed from the quarry site.

The access will be via Swensen Gulch. The access road from Swensen Gulch to the ridge will be lowered on the south end to match the elevation of the quarry operation. On the north end, the road will pivot about a point near N 10,808 and E 10,529.

Culverts will be placed wherever an access road would tend to dam an established drainage channel. In addition, a levee will be maintained on the west side of the quarry to prevent draining down Swensen Gulch from entering the quarry or mixing with the Pesthouse Canyon drainage.

Grades on roads will be established at no greater than 10% if possible.

Grading and Regrading

No attempt will be made to grade the slopes. The area is typified by ledges and it is felt that placing one to three feet of top soil on the mine benches will produce an environment much like the one now in existence. The soil will be placed by front-end loader on the periphery of a bench before the next lower bench is excavated. The final stepped slope on the north side will be from 30° to 40°. On the south side, the stepped slope will be near 45°. No soil treatment should be required since the natural soil will be replaced essentially unaltered. The step configuration of the slope should also retard water erosion and prevent ponding. The lower portion of the quarry will be back filled with undersize limestone prior to covering with soil. This procedure should provide good drainage and prevent ponding at the same time.

2. Will Mulch be used? () Yes (X) No. Start cycle of growth
and decay of plant tissues for humus.
Type: _____ Rate/Acre _____ lbs.

3. Revegetation Plan and Schedule -

Species	Rate/ Acre	Planting Location	Facing N-S-E-W	Season to be replanted
Medicago sativa				Fall
Melilotus officinalis	Seed Mix			"
Agropyron elongatum	20 lbs/acre			"
Secale cereale				"
Chyrsothamnus nauseosus	As needed			

Tube packed

Atriplex caneseens

4. Will affected area be subject to livestock or wildlife grazing?
(X) Yes () No Will vegetation protection be needed? Low wildlife
population and small size of the area do not make protection necessary.
5. Will irrigation be used: () Yes (X) No Type _____
6. Describe maintenance procedures for revegetation if needed, until surety
release is granted. Foliage development will be monitored up to three years
after cessation of mining and reseeding will be done until desired results
are obtained.



STATE OF UTAH

COUNTY OF SALT LAKE

I, W. H. Jensen, having been duly sworn
depote and attest that all of the representations contained in the foregoing
application are true to the best of my knowledge; that I am authorized to
complete and file this application on behalf of the Applicant and this
application has been executed as required by law.

Signed: W. H. Jensen

W. H. Jensen, General Manager

Taken, subscribed and sworn to before me the undersigned authority
in my said county, this 11 day of September, 1980.

Notary Public: Keith L. Hansen

My Commission Expires: November 2, 1983

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides as
follows:

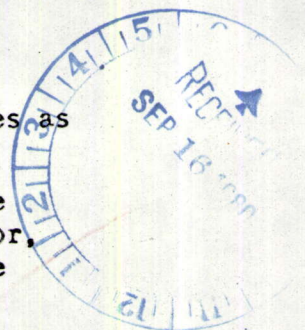
"Information relating to the location, size, or nature
of the deposit and marked confidential by the operator,
shall be protected as confidential information by the
Board and the Division and not be a matter of public
record in the absence of a written release from the
operator, or until the mining operation has been
terminated as provided in subsection (2) of section
40-8-21."

Is confidential information contained herein?

YES _____ (Initial)

NO X _____ (Initial)

Sections desired to be maintained as confidential information -



MINING APPLICATION
NO. _____
Date _____

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS
(Sec Rule M of General Rules and Regulations)

1. Name of Applicant or Company Kennecott Corporation
Kennecott Minerals Company, Utah Copper Division
Corporation (☒) Partnership () Individual ()
2. Address P. O. Box 6500, Salt Lake City, Utah 84106
Permanent Temporary
3. Name and title of person representing company W. H. Jensen, General Manager
4. Address Same Office Phone 263-6123
5. Location of Operation Tooele Sec. 11 T. 6 S. R. 4 W.
County
6. Name of Mine Mercur Limestone
7. Mineral to be mined: Mining method:
() Coal () Flagstone Open-pit
() Copper () Gravel
() Manganese () Shale
() Iron Ore () Uranium
() Phosphate () Gilsonite
() Potash () Bituminous Sandstone
() Fluorspar () Tungsten
(☒) Other (specify) Limestone
8. Have you or any person, partnership or corporation associated with you received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein?
(☒) Yes () No
If yes, list all approval numbers now under surety:
#ACT-035-002



9. Owner/Owners of record of the surface area within the land to be affected:

U. S. Government, Bureau of Land Address _____
Management Address _____
Address _____
Address _____



10. Owner/Owners of record of minerals to be mined:

<u>Kennecott Corporation</u>	Address	<u>Same</u>
_____	Address	_____
_____	Address	_____
_____	Address	_____

11. Owner/Owners of record of all other minerals within any part of the land affected:

<u>N/A</u>	Address	_____
_____	Address	_____
_____	Address	_____

11a. Have the above owners been notified in writing?
() Yes () No

12. Source of Operator's legal right to enter and conduct operations on land to be covered by the Notice Unpatented Mining Claim Ownership

13. Approximate acreage to be disturbed:

A) Mining Operation Area -	<u>3.5</u>	acres
(include operations, storage, & disposal area)		
B) Access Road or Haulageway -	<u>1.6</u>	acres
C) Drainage System -	_____	acres

TOTAL ACRES: 5.1

14. Give the names and post office addresses of every principal Executive, Officer, Partner, (or person performing a similar function) of Applicant:

Name:	Title:	Address:
a. <u>W. H. Jensen</u>	<u>General Manager</u> <u>Utah Copper Division</u>	<u>P. O. Box 6500</u> <u>Salt Lake City, Utah 84106</u>
b. <u>I. G. Pickering</u>	<u>Senior Vice President</u> <u>Kennecott Minerals Co.</u>	<u>P. O. Box 11248</u> <u>Salt Lake City, Utah 84147</u>
c. <u>G. F. Joklik</u>	<u>President</u> <u>Kennecott Minerals Co.</u>	<u>P. O. Box 11248</u> <u>Salt Lake City, Utah 84147</u>
d. _____		

15. Has Applicant, any subsidiary or affiliate or any person, partnership, association, trust, or corporation controlled by or under common control with Applicant, or any person required to be identified by Item 14, ever had an approval of a Notice of Intention withdrawn or has surety relating thereto ever been forfeited? () Yes (x) No

If yes, explain:

STATE OF UTAH

COUNTY OF SALT LAKE

I, W. H. Jensen, having been duly sworn
depose and attest that all of the representations contained in the foregoing
application are true to the best of my knowledge; that I am authorized to
complete and file this application on behalf of the Applicant and this
application has been executed as required by law.

Signed: W. H. Jensen

W. H. Jensen, General Manager

Taken, subscribed and sworn to before me the undersigned authority

in my said county, this 11 day of September, 1980.

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My Commission Expires: November 2, 1983

PLEASE NOTE:

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Is confidential information contained herein?

YES _____ (Initial)

NO X _____ (Initial)

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MINING APPLICATION
NO. _____

Date _____

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116



MINING AND RECLAMATION PLAN

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(b) Current Land Use(s) Limited grazing of livestock
(c) Possible or Prospective Future Land Use(s) Same as (a)
4. What vegetation exists on the land proposed to be affected Typical basin
and range grasses and pinion-juniper vegetation.
(a) Types and Estimated Percent cover or density: Approx. 5% cover consisting
of typical basin and range grasses and pinion-juniper vegetation
5. What is the pH range of soil before mining? 5.6 to 7.5 pH
Name of Person or Agency and method of determining pH Kennecott laboratory
technicians by mixing 100 gm of soil and 100 ml distilled water
6. Site elevation above sea level 6000 to 6300
7. In case of coal, oil shale, and bituminous sandstone:
Principal seam(s) and thickness(es) None evident
8. Estimated duration of mining operations one (1) year to mine 10,000 tons
9. Has overburden, waste or rejected materials been classified as acid or
alkali producing? (X) Yes () No
Does the above material being moved have any other characteristics
affecting revegetation? No
10. Will any underground workings or aquifers be encountered? () Yes (X) No
Describe _____
Is there an active discharge of water from abandoned deep mines on or
crossing the land affected? () Yes (X) No If yes, describe
the quality of water being discharged. _____

11. Describe specifically a detailed procedure for: (See attached narrative)
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GRADING AND REGRADING

Specifically describe: (See attached narrative)

- (a) Typical cross-section of regrading.
- (b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.
- (c) What type of soil treatment will be utilized.
- (d) The method of drainage control for the final regraded area.
- (e) Maximum grading slope.

TESTING

1. Describe method for testing stability of reclamation fill material.
The stability of the soil material will not be a problem. No testing of the stability of reclamation fill material is necessary.
- Describe method for the testing of soil that is intended to support vegetation The reseeding will occur as the soil is deposited on the slopes to take advantage of the loose nature of the fill.
2. Describe any soil treatment employed as an aid to revegetation _____
A commercial fertilizer (16-16-8) will be used on reclamation sites.
3. Describe surface preparation of areas intended to support vegetation:
All areas smooth enough to work will be contoured with a small dozer.
The grain drill will apply seed mix at a rate of 20 lbs/acre.

REVEGETATION

1. Revegetation to be completed by:
- | | |
|---|---|
| <input checked="" type="checkbox"/> Operator | <input type="checkbox"/> Hydroseeding |
| <input type="checkbox"/> Soil Conservation District | <input type="checkbox"/> Aerial Seeding |
| <input type="checkbox"/> Private Contractor | <input checked="" type="checkbox"/> Conventional or Rangeland Drill |
| <input type="checkbox"/> Other (specify) _____ | <input checked="" type="checkbox"/> Broadcast |
| | <input type="checkbox"/> Other _____ |

Mining Plan

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2. Will Mulch be used? () Yes (X) No. Start cycle of growth
and decay of plant tissues for humus.
Type: _____ Rate/Acre _____ lbs.

3. Revegetation Plan and Schedule -

Species	Rate/ Acre	Planting Location	Facing N-S-E-W	Season to be replanted
Medicago sativa				Fall
Melilotus officinalis	Seed Mix			"
Agropyron elongatum	20 lbs/acre			"
Secale cereale				"
Chyrsothamnus nauseosus	As needed			

Tube packed

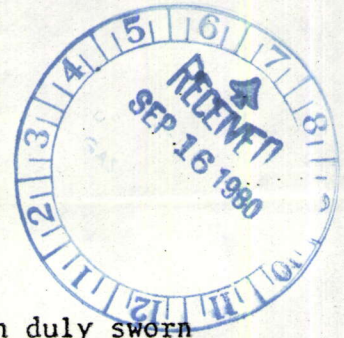
Atriplex caneseens

4. Will affected area be subject to livestock or wildlife grazing?
(X) Yes () No Will vegetation protection be needed? Low wildlife
population and small size of the area do not make protection necessary.

5. Will irrigation be used: () Yes (X) No Type _____

6. Describe maintenance procedures for revegetation if needed, until surety
release is granted. Foliage development will be monitored up to three years
after cessation of mining and reseeding will be done until desired results
are obtained.





STATE OF UTAH

COUNTY OF SALT LAKE

I, W. H. Jensen, having been duly sworn

depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed: W. H. Jensen

W. H. Jensen, General Manager

Taken, subscribed and sworn to before me the undersigned authority

in my said county, this 11 day of September, 1980.

Notary Public: Keith L. Hansen

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Is confidential information contained herein?

YES _____ (Initial)

NO X _____ (Initial)

Sections desired to be maintained as confidential information -

